

### REMARKS

Claims 1-18 are pending. Claim 1 is an independent claim.

Applicant has amended claims 1, 6 and 18. No new matter has been added.

Applicant has added new claims 38-45. New claim 38 is an independent claim. Support for these new claims is found in FIG. 9 in the detailed description as originally filed. No new matter has been added.

The examiner uses Schmitt and Plutowski to reject claims 1-3 and 6-18 as having been obvious.

Claim 1 recites "forming a master membership grade for the at least one product based on the option selection membership grades." The examiner admits that Schmitt does not include this quoted claim feature and looks to Plutowski to fill this deficiency.

Plutowski fails to teach or suggest "forming a master membership grade for the at least one product based on the option selection membership grades."

The examiner directs applicant to FIG. 1C of Plutowski to disclose this quoted feature. However, applicant believes that the examiner has mischaracterized Plutowski. Plutowski merely uses fuzzy logic to provide a degree of membership. More specifically, Plutowski teaches:

3. Fuzzy Membership Assignment: a distribution (possibly non-probabilistic) is applied over the actions in the action database. See FIG 1C.

Given a fuzzy policy the action selection module simultaneously applies one or more of the actions. Therefore, fuzzy control as defined here allows multiple actions to be triggered in parallel. Moreover the action selection mechanism may also utilize the weighting specified by the distribution to initialize parameters of each action. See for instance FIG 1C.

The definition of Fuzzy Policy we use here may be inconsistent with definitions used in prior art, and is not included in the tutorial treatment explained in [Kaelbling Littman and Moore 1996] and [Sutton and Barto 1998], which concentrate exclusively on stochastic control.

However, Fuzzy Policy as defined here is related to "fuzzy sets" in that they both specify "degree of membership" rather than "probability." Fuzzy Policy as defined here also allows more than one action to be selected in parallel by the action

selection mechanism, whereas a stochastic policy expects only a single action to be selected at one moment in time. (col. 2, lines 65-67 and col. 3, lines 1-19)

This degree of membership is very different from forming a master membership grade for the at least one product based on the option selection membership grades, as claimed in claim 1.

Plutowski fails to teach or suggest any master membership grade based on option selection membership grades, but only <sup>teaches</sup> on the action selection mechanism utilizing the weighting specified by the distribution to initialize parameters of each action.

Assuming arguendo, that there is some suggestion to combine Schmitt and Plutowski (and there is no such suggestion), such a combination would only provide an the action selection mechanism utilizing the weighting specified by the distribution to initialize parameters of each action.

Accordingly, claim 1 is not rendered obvious by the combination of Schmitt and Plutowski.

The examiner uses Schmitt, Plutowski and Junkin to reject claims 4 and 5 as having been obvious.

Claim 1 is not rendered obvious by Schmitt, Plutowski and Junkin. Claims 4 and 5 depend upon, and further limit, claim 1. Accordingly, claim 4 and 5 are not rendered obvious by Schmitt, Plutowski and Junkin.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

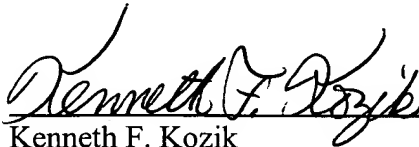
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Enclosed is a \$108 check for excess claims and a \$110 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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